



**ET-7055**  
**PET-7055**

**ET-7255**  
**PET-7255**

Ethernet I/O Module with 8-channels DI, 8-channels DO

### Features

- Built-in Web Server
- Web HMI
- Support for both Modbus TCP and Modbus UDP Protocols
- Communication Security
- 2-port Ethernet Switch for Daisy-Chain Topology
- Dual Watchdog
- Wide Operating Temperature Range: -25 ~ +75°C
- I/O Pair Connection
- Built-in I/O
  - DI/Counter: 8 Channels
  - DO: 8 Channels



### Introduction

The ET-7055/PET-7055/ET-7255/PET-7255 provides 8 Dry/wet contact digital input channels and 8 source-type digital output channels. It features optical isolation for 2500 Vdc of transient overvoltage protection but doesn't provide channel-to-channel isolation. Each input channel can be used as a 32-bit counter and each output channel can drive 650 mA load. The power-on value and safe value of digital output channel are programmable. It can safely be used in applications where hazardous voltages are present.

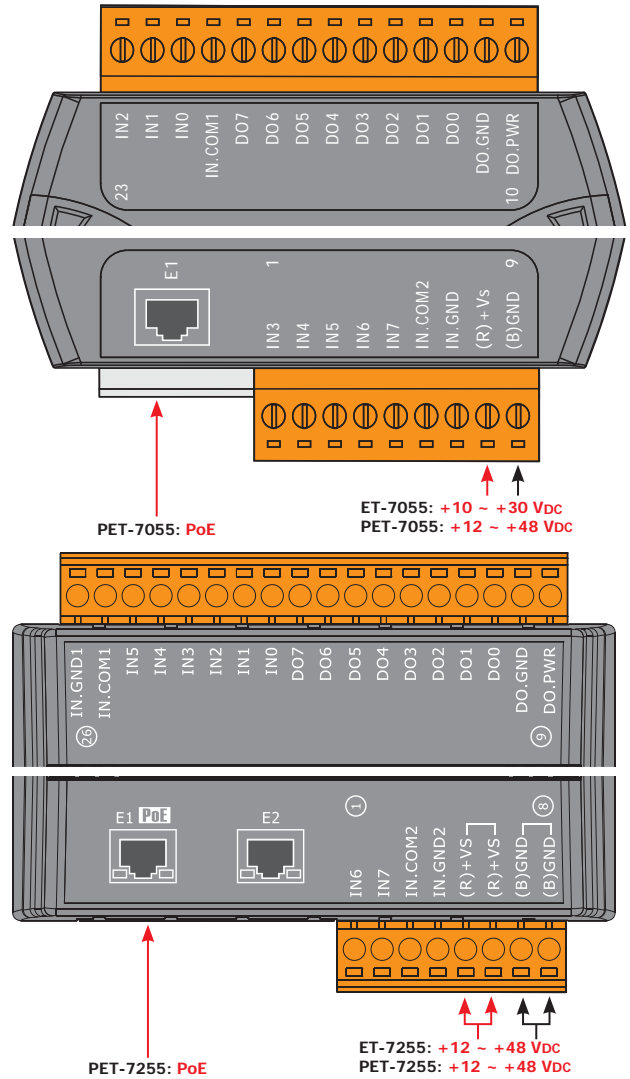
### System Specifications

Models	ET-7055	PET-7055	ET-7255	PET-7255
<b>Software</b>				
Built-in Web Server			Yes	
Web HMI			Yes	
I/O Pair Connection			Yes	
<b>Communication</b>				
Ethernet Port	1 x RJ-45, 10/100 Base-TX		2 x RJ-45, 10/100 Base-TX, Switch Ports	
PoE	-	Yes	-	Yes
Protocol	Modbus TCP, Modbus UDP			
Security	ID, Password and IP Filter			
Dual Watchdog	Yes, Module (0.8 seconds), Communication (Programmable)			
<b>LED Indicators</b>				
for System Running			Yes	
for Ethernet Link/Act			Yes	
for DI/DO status		-		Yes
for PoE Power	-	Yes	-	Yes
<b>2-Way Isolation</b>				
Ethernet	1500 Vdc	-	1500 Vdc	-
I/O	2500 Vdc		2500 Vdc	
<b>EMS Protection</b>				
ESD (IEC 61000-4-2)	±4 kV Contact for Each Terminal and ±8 kV Air for Random Point			
EFT (IEC 61000-4-4)	±4 kV for Power Line Line		±2 kV for Power Line	
Surge (IEC 61000-4-5)	±0.5 kV for Power Line		±2 kV for Power Line	
<b>Power</b>				
Reverse Polarity Protection	Yes			
Powered from Terminal Block	10 ~ 30 Vdc	12 ~ 48 Vdc	12 ~ 48 Vdc	12 ~ 48 Vdc
Powered from PoE	-	Yes, IEEE 802.3af, Class1	-	Yes, IEEE 802.3af, Class1
Consumption	2.4 W	3.0 W	3.8 W	4.6 W
<b>Mechanical</b>				
Dimensions (W x L x H)	72 mm x 123 mm x 35 mm		76 mm x 120 mm x 38 mm	
Installation	DIN-Rail or Wall Mounting			
<b>Environment</b>				
Operating Temperature	-25 ~ +75°C			
Storage Temperature	-30 ~ +80°C			
Humidity	10 ~ 90% RH, Non-condensing			

### I/O Specifications

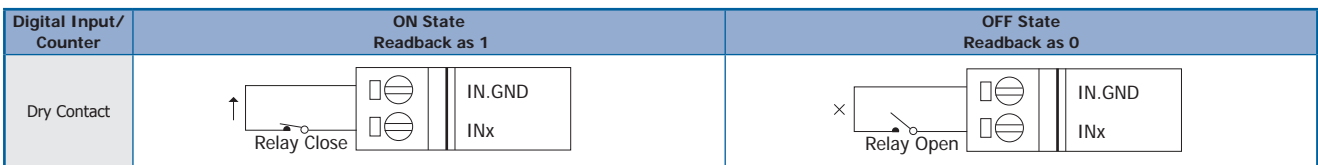
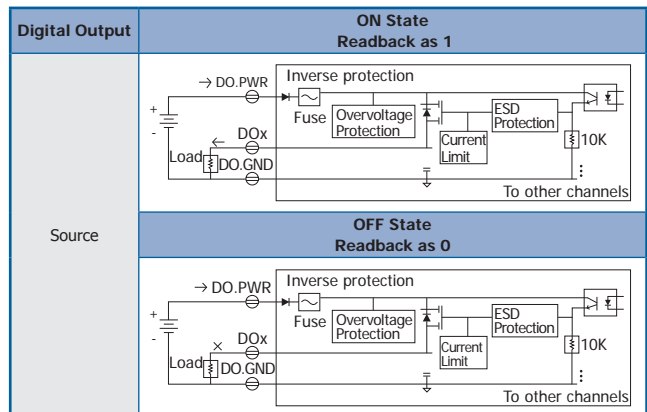
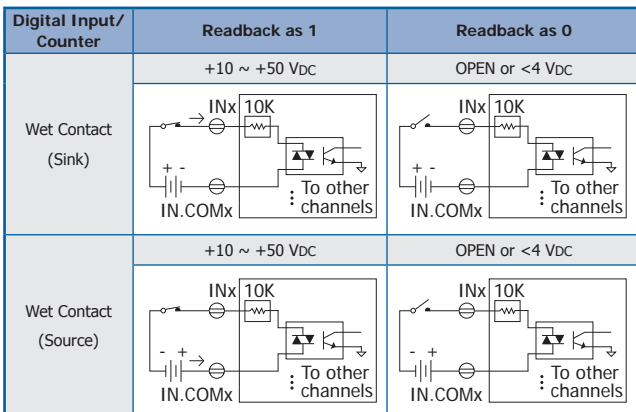
Models	ET-7055	PET-7055	ET-7255	PET-7255
<b>Digital Input/Counter</b>				
Channels	8			
Contact	Dry +Wet			
Sink/Source (NPN/PNP)	Dry: Source Wet: Sink/Source			
Wet Contact	On Voltage Level	+10 Vdc ~ +50 Vdc		
	Off Voltage Level	+4 Vdc Max.		
Dry Contact	On Voltage Level	Close to GND		
	Off Voltage Level	Open		
Input Impedance	10 kΩ			
Counters	Max. Count	4,294,967,295 (32 bits)		
	Max. Input Frequency	500 Hz	100 Hz	
	Min. Pulse Width	1 ms	5 ms	
Overvoltage Protection	+70 Vdc			
Effective Distance	500 M Max.			
<b>Digital Output</b>				
Channels	8			
Type	Isolated Open Collector			
Sink/Source (NPN/PNP)	Source			
Max. Load Current	650 mA/channel at 25°C			
Load Voltage	+10 Vdc ~ +40 Vdc			
Overvoltage Protection	47 Vdc			
Overload Protection	-			
Short-circuit Protection	Yes			
Power-on Value	Yes, Programmable			
Safe Value	Yes, Programmable			

### Pin Assignments



3  
3  
Ethernet I/O Products

### Wire Connections



### Ordering Information

ET-7055 CR	Ethernet I/O Module with 8-channels DI, 8-channels DO (RoHS)
PET-7055 CR	PoE Ethernet I/O Module with 8-channels DI, 8-channels DO (RoHS)
ET-7255 CR	Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels DI, 8-channels DO (RoHS)
PET-7255 CR	PoE Ethernet I/O Module with 2-port Ethernet Switch, with 8-channels DI, 8-channels DO (RoHS)